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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,350	10/16/2000	Tatsuki Kouwa	/Q61020	9796

7590 12/09/2002
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EXAMINER

GONZALEZ, JULIO C

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 12/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/688,350

Applicant(s)

KOUWA ET AL.

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 2 and 4, a resistor for limiting current is disposed between an element and the input terminal. What is considered "an element" within the control apparatus? Any element? There are many elements in the control apparatus.

The specifications disclose more than one element that takes part in the lighting of the light emitting element. For example, in figure 1 of the present invention, transistor 114, comparator 108 and the transistor 110 (page 9, lines 1-16) all take part in the lighting of the light emitting element. From figure 4, there are other elements within the voltage control apparatus that take part in the lighting of the light emitting element, such as resistor 145, transistor 144, resistor 146 and so on. Respectfully, it is not clear as to which element within the voltage control apparatus the claim may be referring.

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morishita in view of Beyn.

Morishita discloses voltage control apparatus for a vehicle having an input terminal, a battery 4, a switch 5, a light emitting element 6, a rotor coil 102, a resistor between an element and the light emitting element 6 (see figure 1). However, Morishita does not disclose explicitly that the resistor decreases the current.

On the other hand, Beyn discloses for the purpose of providing desirable safe operating conditions for alternator systems, a battery 24, a switch 42, a light emitting diode 46 connected to a current limiting resistor 60 (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a voltage control apparatus as disclosed by Morishita and to modify the invention by explicitly disclosing a current limiting resistor with an LED discloses for the purpose of providing desirable safe operating conditions for alternator systems as disclosed by Beyn.

5. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morishita in view of Beyn and Mashino.

Morishita discloses voltage control apparatus for a vehicle having an input terminal, a battery 4, a switch 5, a light emitting element 6, a rotor coil 102, a resistor between an element and the light emitting element 6 (see figure 1). However, Morishita does not disclose explicitly that the resistor decreases the current.

On the other hand, Beyn discloses for the purpose of providing desirable safe operating conditions for alternator systems, a battery 24, a switch 42, a light emitting diode 46 connected to a current limiting resistor 60 (see figure 1). However, neither Morishita nor Beyn disclose explicitly having a voltage detector circuit.

On the other hand, Mashino discloses for the purpose of providing an inexpensive way of controlling the voltage of a generator and reduce fluctuation of the characteristics of the magnetic circuit of generators, a circuit for detecting the voltage of a control apparatus (see abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a voltage control apparatus as disclosed by Morishita and to modify the invention by explicitly disclosing a current limiting resistor with an LED discloses for the purpose of providing desirable safe operating conditions for alternator systems as disclosed by Beyn and to use a voltage detection circuit for the purpose of providing an inexpensive way of controlling the voltage of a generator and reduce fluctuation of the characteristics of the magnetic circuit of generators as disclosed by Mashino.

Response to Arguments

6. Applicant's arguments filed 10/10/02 have been fully considered but they are not persuasive.

The specifications disclose more than one element that takes part in the lighting of the light emitting element. For example, in figure 1 of the present invention, transistor 114, comparator 108 and the transistor 110 (page 9, lines 1-16) all take

part in the lighting of the light emitting element. From figure 4, there are other elements within the voltage control apparatus that take part in the lighting of the light emitting element, such as resistor 145, transistor 144, resistor 146 and so on.

Respectfully, it is not clear as to which element within the voltage control apparatus the claim may be referring.

Also, the input terminal for inputting the voltage of the battery is not clearly distinguish or defined in the claims.

Morishita may disclose a resistor 314 between an element 315 of the voltage control apparatus 3, which is a voltage regulator for a vehicle, and the input terminal (see figure 1).

Allowable Subject Matter

7. Claims 3 and 5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

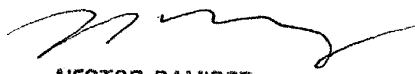
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371.

Application/Control Number: 09/688,350
Art Unit: 2834

Page 8

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Jcg

December 4, 2002